



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,403	01/19/2007	Hyun-Wook Kim	4900-06085832	2761
22429	7590	11/23/2009	EXAMINER	
LOWE HAUPTMAN HAM & BERNER, LLP			SARWAR, BABAR	
1700 DIAGONAL ROAD			ART UNIT	PAPER NUMBER
SUITE 300				
ALEXANDRIA, VA 22314			2617	
			MAIL DATE	DELIVERY MODE
			11/23/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/585,403	KIM ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	BABAR SARWAR	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 03 September 2009.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-12 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-12 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 07 July 2006 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ .	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____ .

**DETAILED ACTION*****Double Patenting***

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

2. **Claims 1-12** are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of **claims 1-13** of copending Application No.

**10/585405.** This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

The following table shows an example of the similarities of **claims 1-12** of the instant application **10/585403** to **claims 1-13** of copending Application No.

**10/585405.**

Instant Application <b>10/585403</b>	Copending Application <b>10/585405.</b>
1. A handover method for providing a packet data service to a dual-band dual mode mobile communication terminal having an asynchronous modem unit and a	7. A handover method for providing a packet data service to a dual-band dual-mode mobile communication terminal in a mobile communication network in which

synchronous modem unit in a mobile communication network in which asynchronous and synchronous mobile communication systems coexist, the method comprising: the first step of, as the mobile communication terminal in a dormant state with respect to the asynchronous mobile communication system moves into an area of the synchronous mobile communication system, a Serving General packet radio service (GPRS) Support Node (SGSN)/Gateway GPRS Support Node (GGSN) of the asynchronous mobile communication system receiving information indicating that handover is required; the second step of the SGSN/GGSN commanding a base station of the synchronous mobile communication system to perform handover, the third step of the mobile communication terminal attempting to originate a call to the base	asynchronous and synchronous mobile communication systems coexist, the dual-band dual-mode communication terminal being provided with an asynchronous modem unit and a synchronous modem unit, the asynchronous mobile communication system having a Gateway General packet radio service (GPRS) Support Node (GGSN) being connected to a packet data service node of the synchronous mobile communication system, the handover method comprising: the first step of, as the mobile communication terminal, in a dormant state with respect to the synchronous mobile communication system, moves into an area of the synchronous mobile communication system, a Serving GPRS Support Node (SGSN)/GGSN of the asynchronous mobile communication system receiving information indicating that handover is required; the second step of the SGSN/GGSN commanding a base station of the synchronous mobile communication
---	---

<p>station, thus executing call processing and channel assignment between the base station and a mobile switching center of the synchronous mobile communication system; the fourth step of performing a negotiation related to call processing and setup between the mobile communication terminal and the base station; the fifth step of the synchronous mobile communication system setting up a trunk; the sixth step of initializing a radio link protocol between the mobile communication terminal and the base station; the seventh step of the base station notifying the mobile switching center that channel assignment has been completed; the eighth step of setting up a packet data call between the mobile communication terminal and a packet data service node of the synchronous mobile communication system; and the ninth step of the synchronous mobile communication system assigning a mobile IP to the mobile</p>	<p>system to perform handover, the third step of the mobile communication terminal attempting to originate a call to the base station, and executing call processing and channel assignment between the base station and the mobile switching center of the synchronous mobile communication system; the fourth step of performing a negotiation related to call processing and setup between the mobile communication terminal and the base station; the fifth step of the synchronous mobile communication terminal setting up a trunk; the sixth step of initializing a radio link protocol between the mobile communication terminal and the base station; and the seventh step of the base station notifying the mobile switching center that the channel assignment has been completed.</p> <p>+</p> <p>6. The handover method according to claim 1, wherein the GGSN of the asynchronous mobile communication system is connected to</p>
---	---

communication terminal.	the packet data service node of the synchronous mobile communication system through a Packet data-Packet data (P-P) interface.
8. A handover method for providing a packet data service to a dual-band dual-mode mobile communication terminal having an asynchronous modem unit and a synchronous modem unit in a mobile communication network in which asynchronous and synchronous mobile communication systems coexist the method comprising: the first step of, as the mobile communication terminal that is connected to the asynchronous mobile communication system and using a packet data service moves into an area of the synchronous mobile communication system, and a handover event occurs, a node B of the asynchronous mobile communication system notifying a Serving General packet radio service (GPRS) Support Node	1. A handover method for providing a packet data service to a dual-band dual-mode mobile communication terminal in a mobile communication network in which asynchronous and synchronous mobile communication systems coexist the dual-band dual-mode communication terminal being provided with an asynchronous modem unit and a synchronous modem unit, the asynchronous mobile communication system having a Gateway General packet radio service (GPRS) Support Node (GGSN) being connected to a packet data service node of the synchronous mobile communication system, the handover method comprising; the first step of, as the mobile communication terminal that is connected to the asynchronous mobile communication system and uses the packet

<p>(SGSN)/Gateway GPRS Support Node (GGSN) of the asynchronous mobile communication system that handover is required; the second step of the SGSN/GGSN requesting a mobile switching center of the synchronous mobile communication system to perform handover, and the mobile switching center requesting the base station of the synchronous mobile communication system to perform handover; the third step of the synchronous mobile communication system performing a procedure of setting control signals and traffic for transmission of packet data; the fourth step of the base station notifying the mobile switching center that handover has been completed, and assigning a forward channel to the mobile communication terminal; the fifth step of the mobile switching center notifying the SGSN/GGSN that handover has been completed; the sixth step of, as the</p>	<p>data service moves into an area of the synchronous mobile communication system, and a handover event occurs, a node B of the asynchronous mobile communication system notifying a Serving GPRS Support Node (SGSN)/GGSN of the asynchronous mobile communication system that handover is required; the second step of the SGSN/GGSN requesting a mobile switching center of the synchronous mobile communication system to perform handover, and the synchronous mobile switching center requesting a base station of the synchronous mobile communication system to perform handover; the third step of the synchronous mobile communication system performing a procedure of setting control signals and traffic for transmission of packet data; the fourth step of the base station notifying the mobile switching center that handover has been completed and assigning a forward channel to the mobile communication terminal; the fifth step of the</p>
--	---

SGSN/GGSN commands the node B to perform handover, the node B directing the mobile communication terminal to perform handover; the seventh step of the mobile communication terminal notifying the base station that handover has been completed if a reverse channel has been assigned and a connection has been established between the mobile communication terminal and the synchronous mobile communication system; the eighth step of the synchronous mobile communication system performing call setup for a packet data service; the ninth step of the base station notifying the synchronous mobile switching center that handover has been completed, and the mobile switching center notifying the SGSN/GGSN that handover has been completed; the tenth step of the SGSN/GGSN requesting the node B to release a connection to the mobile communication terminal; the eleventh step	mobile switching center notifying the SGSN/GGSN that handover has been completed; the sixth step of, as the SGSN/GGSN commands the node B to perform handover, the node B directing the mobile communication terminal to perform handover; the seventh step of performing assignment of a reverse channel between the mobile communication terminal and the synchronous mobile communication system, and the mobile communication terminal interfacing with the synchronous mobile communication system and notifying the base station that handover has been completed; the eighth step of the synchronous mobile communication system performing call setup for the packet data service; the ninth step of the base station notifying the synchronous mobile switching center that handover has been completed, and the mobile switching center notifying the SGSN/GGSN that handover has been completed; and the tenth
---	---

<p>of the mobile communication terminal establishing a PPP with the packet data service node of the synchronous mobile communication system; and the twelfth step of assigning a mobile IP to the mobile communication terminal.</p>	<p>step of the SGSN/GGSN requesting the node B to release a connection to the mobile communication terminal. + 6. The handover method according to claim 1, wherein the GGSN of the asynchronous mobile communication system is connected to the packet data service node of the synchronous mobile communication system through a Packet data-Packet data (P-P) interface.</p>
<p>2. The handover method according to claim 1, wherein the SGSN/GGSN is notified by a node B of the asynchronous mobile communication system or the base station of the synchronous mobile communication system that handover is required at the first step.</p>	<p>8. The handover method according to claim 7, wherein the SGSN/GGSN is notified by a node B of the asynchronous mobile communication system or the base station of the synchronous mobile communication system that handover is required at the first step.</p>
<p>3. The handover method according to claim 1, wherein the SGSN/GGSN receives an identification number of the mobile</p>	<p>9. The handover method according to claim 7, wherein the SGSN/GGSN receives an identification number of the mobile</p>

communication terminal at the first step.	communication terminal at the first step.
4. The handover method according to claim 1, wherein a message, including the handover command transmitted by the SGSN/GGSN to the mobile communication terminal at the second step, includes channel assignment information and traffic channel entry information.	10. The handover method according to claim 7, wherein a message, including the handover command transmitted from the SGSN/GGSN to the mobile communication terminal at the second step, includes channel assignment information and traffic channel entry information.
5. The handover method according to claim 1, wherein the third step comprises the steps of: the base station transmitting a service request message to the mobile switching center in response to the call origination attempt by the mobile communication terminal; the mobile switching center requesting the base station to assign a channel; and the base station transmitting a channel assignment message to the mobile communication terminal.	11. The handover method according to claim 7, wherein the third step comprises the steps of: the base station transmitting a service request message to the mobile switching center in response to the attempt by the mobile communication terminal to originate a call; the mobile switching center requesting the base station to assign a channel; and the base station transmitting a channel assignment message to the mobile communication terminal.

6. The handover method according to claim 1, wherein the fifth step comprises the steps of: the base station requesting a packet controller of the synchronous mobile communication system to set up a trunk; the packet controller requesting the packet data service node to set up a trunk, and receiving a reply to the trunk setup request; and the packet controller transmitting a reply signal received from the packet data service node to the base station.	12. The handover method according to claim 7, wherein the fifth step comprises the steps of: the base station requesting the packet controller of the synchronous mobile communication system to set up a trunk; the packet controller requesting the packet data service node to set up a trunk and receiving a reply to the trunk setup request; and the packet controller transmitting a reply signal received from the packet data service node to the base station.
9. The handover method according to claim 8, wherein the third step comprises the steps of: the base station requesting a packet controller of the synchronous mobile communication system to assign a channel; the packet controller requesting location registration from the packet data service node of the synchronous mobile communication system and receiving results of the location registration request;	3. The handover method according to claim 1, wherein the third step comprises the steps of: the base station requesting a packet controller of the synchronous mobile communication system to assign a channel; the packet controller requesting location registration from the packet data service node of the synchronous mobile communication system and receiving results of the location registration request; the packet data service

the packet data service node requesting location registration from the SGSN/GGSN and receiving a reply to the location registration request; and the packet controller transmitting channel assignment information to the base station.	node requesting location registration from the SGSN/GGSN and receiving a reply to the location registration request, and the packet controller transmitting channel assignment information to the base station.
10. The handover method according to claim 8, wherein a message, including the handover direction transmitted by the node B to the mobile communication terminal at the sixth step, includes information used for channel assignment between the mobile communication terminal and the synchronous mobile communication system.	4. The handover method according to claim 1, wherein a message, including the handover direction transmitted from the node B to the mobile communication terminal at the sixth step, includes information used for channel assignment between the mobile communication terminal and the synchronous mobile communication system.
11. The handover method according to claim 8, wherein the eighth step comprises the steps of: the base station requesting the packet controller of the synchronous mobile communication system to set up a call; the packet controller requesting location	5. The handover method according to claim 1, wherein the eighth step comprises the steps of: the base station requesting the packet controller of the synchronous mobile communication system to set up a call; the packet controller requesting location

registration from the packet data service node of the synchronous mobile communication system and receiving results of the location registration request; the packet data service node requesting location registration from the SGSN/GGSN and receiving a reply to the location registration request; and the packet controller notifying the base station that call setup has been completed.	registration from the packet data service node of the synchronous mobile communication system and receiving results of the location registration request; the packet data service node requesting location registration from the SGSN/GGSN and receiving a reply to the location registration request; and the packet controller notifying the base station that call setup has been completed.
---	---

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BABAR SARWAR whose telephone number is (571)270-5584. The examiner can normally be reached on MONDAY TO FRIDAY 09:00 A.M -05:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NICK CORSARO can be reached on (571)272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BABAR SARWAR/  
Examiner, Art Unit 2617

/BS/

/NICK CORSARO/  
Supervisory Patent Examiner, Art Unit 2617